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ANAPLASMOSIS IN CATTLE

LEAFLET NO. 437

UNITED STATES DEPARTMENT OF AGRICULTURE

ANAPLASMOSIS IN CATTLE

Anaplasmosis is a disease caused by microscopic parasites[1] that live in red blood cells.

Each year, anaplasmosis costs American cattle raisers millions of dollars. In some outbreaks it kills half the cattle that catch it; other times, less than 1 percent will die.

All cattle can catch anaplasmosis; it is most severe in mature cattle and usually is mild in calves.

Deer can have a mild form of the disease. Anaplasmosis occurs in sheep but is caused by a different parasite that does not harm cattle. Human beings cannot catch anaplasmosis.

Anaplasmosis may be found almost anywhere that cattle are raised. It occurs most frequently in warmer areas. It is spreading.

Cattle are more likely to catch anaplasmosis in the warm months of summer and early fall than at any other time. They can catch it at any time, however.

WHAT IT DOES

Anaplasma parasites attack red blood cells; this causes anemia.

The anemia makes lips, nostrils, mouth linings, and other visible mucous membranes look pale. The animal breathes faster than usual. and its heart beats faster. It loses condition. The animal grows weaker, stops chewing its cud. and is constipated. Symptoms vary in intensity; recovery is slow. When the disease lasts a long time, the animal's tissues become yellowish.

The active disease may last 2 to 4 weeks after the first symptoms appear. It may disappear in 1 or 2 days. In rare cases, older cattle die within 24 hours. Sometimes the disease lasts a long time.

Animals that recover from the active disease are carriers and can spread the disease.

Anaplasmosis can be confused with other diseases, such as tick fever, anthrax, shipping fever, and leptospirosis. It may appear in animals already infected with another disease.

HOW IT SPREADS

Anaplasmosis is spread naturally by mosquitoes, horse flies, stable flies, and horn flies in a herd when they bite infected animals and then bite healthy animals.

Ticks also spread anaplasmosis. In ticks, the parasites survive for days or months, and may even multiply.

It is also spread when dehorning and tattooing instruments, bleeding needles, or vaccination needles are used on a carrier animal and then. without sterilizing, on a healthy animal. Anaplasmosis is spread through many herds by using the same vaccination needle on several animals.

Anaplasmosis does not spread by contact or through the feces or urine of carriers or sick animals. Some calves born of infected mothers are reported to have been infected before birth.

TREATING SICK ANIMALS

Call a veterinarian as soon as you notice symptoms of anaplasmosis. He may give blood transfusions. These help the animal recover.

If they are used early, certain antibiotics may shorten the course of the disease.

Keep sick animals away from well ones. Keep them in the shade; give them plenty of fresh water and a succulent feed.

Apply insecticides to animals to protect them from biting insects and ticks. Use insecticides on sick animals with caution. Follow instructions on the container label carefully.

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[1] *Anaplasma marginale.*

PREVENTING OUTBREAKS

A blood test to find animals infected with anaplasmosis has been developed. It is called a complement-fixation test. If you live in an area where anaplasmosis is common, ask a veterinarian to collect blood for the complement-fixation test to find the carriers in your herd. Keep animals that react to the test away from negative animals until you send them to slaughter or until you maintain them in a separate herd.

Apply insecticides to all animals during insect season.

Sterilize dehorning, castrating, and other surgical instruments. Wash used instruments and needles in cold water to remove blood. Then boil them for 20 minutes.

TICK AND INSECT CONTROL

Ticks, mosquitoes, stable flies, horn flies, and horse flies can be controlled by spraying or dipping. The recommendations for dairy cattle differ from those for beef cattle because some insecticides may be secreted in milk.

Dairy Cattle

Control ticks and insects on dairy cattle with sprays containing dichlorvos (DDVP), Ciodrin, pyrethrum, or rotenone. Spray thoroughly every day or two, or as directed on the label.

Beef Cattle

Control ticks on beef cattle by dipping or spraying with a water suspension or emulsion containing coumaphos (Co-ral), dioxathion (Delnav), lindane, ronnel, or toxaphene, or spray with carbaryl (Sevin) or malathion. Repeat treatment as needed or as directed on the label.

These insecticides and also methoxychlor and Ruelene sprays will control biting flies. The insecticides named under "Dairy Cattle" above are also effective on beef cattle. Apply as often as needed or as specified on the label.

Insecticide dusts may also be used to control biting flies. Follow label instructions.

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Young steer with chronic anaplasmosis. Note the loss of condition and unthriftiness.

PRECAUTIONS

Insecticides used improperly can be injurious to man and animals. Use them only when needed and handle them with care. Follow the directions and heed all precautions on the labels.

Read the label before you buy to make sure the product is suitable or spraying or dipping cattle.

Carefully measure water and insecticide and mix according to instructions on the label.

Do not apply more insecticide than recommended because too much may harm farm animals. Calves are particularly susceptible to poisoning.

Do not apply insecticides less than the number of days before slaughter specified on the label. Do not contaminate food, water, or food and water containers.

Fence off dipping vats so livestock cannot drink the insecticide.

Keep insecticides in closed, well-labeled containers in a dry place. Store them where they will not contaminate food or feed, and where children, livestock, and pets cannot reach them.

Avoid repeated or prolonged contact of insecticides with the skin. Avoid prolonged inhalation of dusts or mists.

Avoid spilling insecticide concentrates on your skin, and keep them out of the eyes, nose, and mouth. If any is spilled on skin or clothing, wash it off the skin and change clothing immediately. Wear clean, dry clothing.

Wash your hands and face before drinking, eating, or smoking and immediately after completing insecticide application.

To protect water resources, fish, and wildlife, do not contaminate lakes, streams, or ponds with insecticide. Do not dump excess spray material or clean spraying equipment near such water. Avoid drift of insecticide to nearby crops or other livestock. Avoid drift of insecticides into bee yards.

Dispose of empty insecticide containers at a sanitary land-fill dump, or bury them at least 18 inches deep in a level, isolated place where they will not contaminate water supplies. If you have trash-collection service, wrap small containers in heavy layers of newspapers and place them in the trash can.

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Prepared by the Animal Disease and Parasite Research Division and the Entomology Research Division, Agricultural Research Service.

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